

# User Recommendation

## NEUMO ConnectS® Flange Connection

You have purchased a high precision item, which demands special requirements on handling and welding technology during installation. In order to ensure the optimal sterile function of the system, following recommendations should be followed:

- NEUMO ConnectS® Flange Connections are delivered pressure tested, but disassembled and single packed. In order to prevent any damage of the sealing faces, please remove the packaging directly before installation only.
- While the items are disassembled, make sure that the sealing faces are not damaged. If necessary, cover the same with plastic protection end caps. In case of any damage, NEUMO can not guarantee the functionality of the Flange Connection anymore.
- During welding of the flanges, make sure that the thermal influence on the sealing area is kept as low as possible. Excessive heat introduction may result in a deformation of the sealing faces. The weld ends shall not be cut back.
- It's important that the sealing faces do not show any traces of dirt or grease during installation and assembly.
- To avoid distortion when bolting the flanges together, the bolts should be tightened in a cross bolt tightening pattern. Tightening torques and the respective information on the individual bolt sizes can be taken out of the chart below.

	M8	M10	M12	M14	M16
Friction coefficient	Tightening torque				
0,10	14,5	30,0	50,0	79,0	121,0
0,12	16,3	33,0	56,0	89,0	136,0
0,14	17,8	36,0	62,0	98,0	150,0
0,16	19,3	39,0	66,0	105,0	162,0
0,18	20,4	41,0	70,0	112,0	173,0
0,20*	21,5	44,0	74,0	119,0	183,0
0,30	25,5	51,0	88,0	141,0	218,0
0,40	27,6	56,0	96,0	152,0	237,0

\* Recommended torque!

### Technical Information on tightening torques for bolts:

As in practice, different friction coefficients may occur, the torques listed in the above chart are considered as reference values only!  
 These torques apply to bolts EN 24014 / 24017, property class 70, at ambient temperature.  
 Before determining the ultimate torque, we recommend tests under operating conditions.

We are confident that by considering these basic guidelines you will be able to appreciate the advantages of the ConnectS® connection. We are looking forward to receive your feedback.



ConnectS® – Flange Connection



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ConnectS® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN 11846 line A

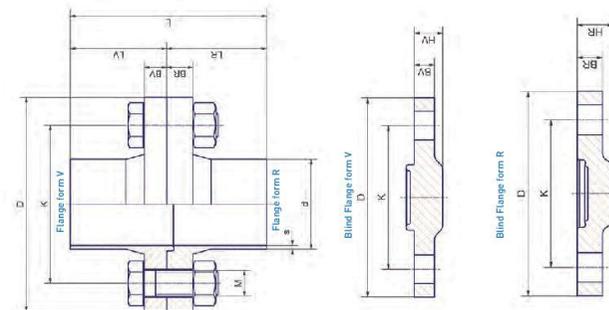
DN	d	s	D	K	L	LR	BR	LV	BV	HR	HV	M
6	8	1	6,0	40	88	45	10	43	8	13	8	4x M 8x30
8	10	1	6,0	40	88	45	10	43	8	13	8	4x M 8x30
10	13	1,5	6,5	45	88	45	10	43	8	13	8	4x M 10x30
15	19	1,5	7,5	55	88	45	10	43	8	13	8	4x M 10x30
20	23	1,5	8,5	60	92	47	12	45	10	17	10	4x M 10x35
25	29	1,5	9,5	70	102	52	12	50	10	17	10	4x M 12x55
32	35	1,5	10,5	78	102	52	12	50	10	17	10	4x M 12x55
40	41	1,5	11,5	85	106	54	14	52	12	19	16	4x M 14x60
50	53	1,5	12,5	95	106	54	14	52	12	19	16	4x M 14x60
65	70	2	14,5	115	130	66	16	64	14	21	18	8x M 12x45
80	85	2	15,5	125	130	66	16	64	14	21	18	8x M 12x45
100	104	2	18,0	150	134	68	18	66	16	23	20	8x M 12x50

ConnectS® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN 11846 line B

DN	d	s	D	K	L	LR	BR	LV	BV	HR	HV	M
6	10,2	1,6	6,0	40	88	45	10	43	8	13	8	4x M 8x30
8	13,5	1,6	6,0	40	88	45	10	43	8	13	8	4x M 8x30
10	17,2	1,6	6,5	45	88	45	10	43	8	13	8	4x M 10x30
15	21,3	1,6	7,5	55	88	45	10	43	8	13	8	4x M 10x30
20	26,9	1,6	8,5	60	92	47	12	45	10	17	10	4x M 10x35
25	33,7	2	9,7	70	102	52	12	50	10	17	10	4x M 12x55
32	42,4	2	10,5	78	102	52	12	50	10	17	10	4x M 12x55
40	48,3	2	11,5	85	106	54	14	52	12	19	16	4x M 14x60
50	60,3	2	12,5	95	106	54	14	52	12	19	16	4x M 14x60
65	76,1	2	14,5	115	130	66	16	64	14	21	18	8x M 12x45
80	88,9	2,3	15,5	125	130	66	16	64	14	21	18	8x M 12x45
100	114,3	2,3	18,0	150	134	68	18	66	16	23	20	8x M 12x50

ConnectS® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN 11846 line C

DN	d	s	D	K	L	LR	BR	LV	BV	HR	HV	M
3/8"	9,53	0,89	6,0	40	88	45	10	43	8	13	8	4x M 8x30
1/2"	12,7	1,65	6,5	45	88	45	10	43	8	13	8	4x M 10x30
3/4"	19,05	1,65	7,5	55	88	45	10	43	8	13	8	4x M 10x30
1"	25,4	1,65	8,5	60	92	47	12	45	10	17	10	4x M 10x35
1 1/2"	38,1	1,65	10,5	78	102	52	12	50	10	17	10	4x M 12x55
2"	50,8	1,65	12,5	95	106	54	14	52	12	19	16	4x M 14x60
2 1/2"	63,5	1,65	13,5	105	106	54	14	52	12	19	16	4x M 14x60
3"	76,2	1,65	14,5	115	130	66	16	64	14	21	18	8x M 12x45
4"	101,6	2,11	18,0	150	134	68	18	66	16	23	20	8x M 12x50



Technical Data

Material	1.4435/316L
Surface finish (product condition)	Ra < 0,8 µm precision turned finish
Sealing	Ethamer-free metallic
Max. permissible pressure	PN10 (DN65/21/2 - DN100/4.1) Type PN100 (up to DN68 available as special design)
Max. operating temperature	-10°C / +200°C
Delta ferrite content max material	< 1%
Connections*	Orbital welding ends in accordance with DIN 11846 line A (DIN), line B (ISO), line C (ASME-BPE)
Tests	EHEDG01 cleanliness test
Approvals	TUV-component testing T=Air
*Alternative material grades (such as 1.4539, AL-6061, etc.) Large dimensions, different connection surface qualities and data for evaluation are available on request	

